21.6” High Brightness Window Display

SUN-216B

User Manual

February 2009

Qume

Division

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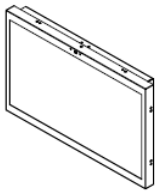
1. Overview

■ Features

- Quick and simple movie playback.
- Simultaneous playback of photo and music
- Auto playback mode
- Playing a Playlist
- USB AutoSync function : The CF card content can be updated from a USB memory.
- Auto brightness control
- Auto fan control
- Audio line out : 2 channel stereo analog

■ Components



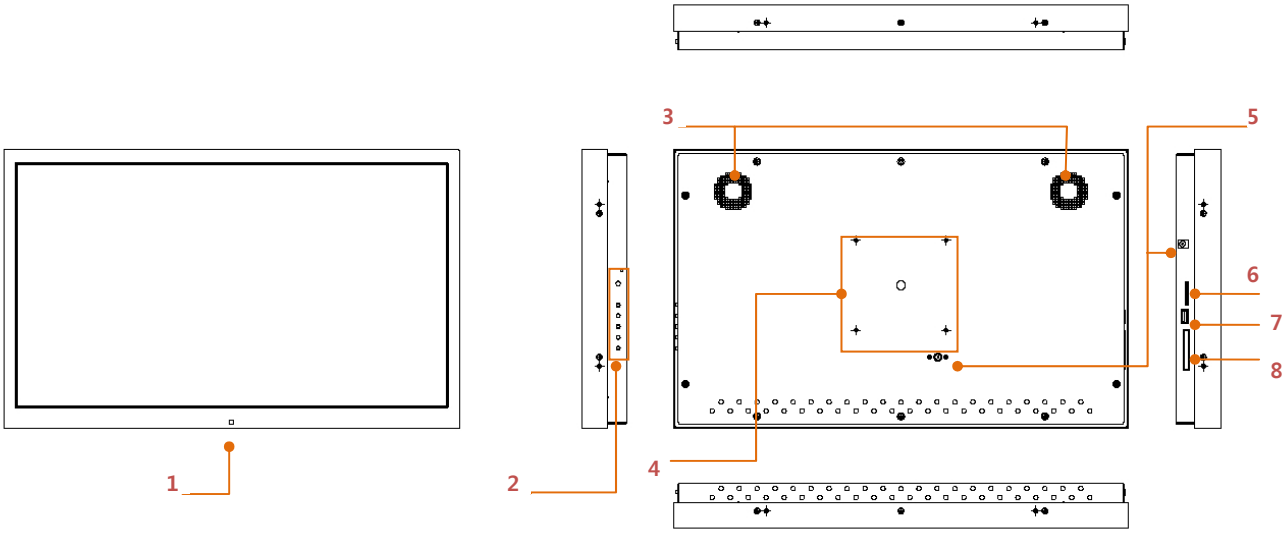
21.6" High Brightness Window Display

Power Cord

Power Adaptor

Remote Control (Optional)

■ Parts and Controls



① LIGHT SENSOR

② LED / IR / OSD CONTROL for Display

[○] Power Indicator	Turns on/off when the power is on/off.
[●] Remote Control Sensor	Aim the remote control towards this spot on the product.
[⏻] Power Button	Press to turn the product on and off
[Menu] Menu Button	Enters or exits a OSD menu.
[↵] Select Button	Selects a function you want to use.
[▲] Up Button	Moves around the items and adjusts a value.
[▼] Down Button	

③ COOLING FAN

④ VESA MOUNT HOLE

⑤ POWER TERMINAL : Connect the power adapter to this jack.

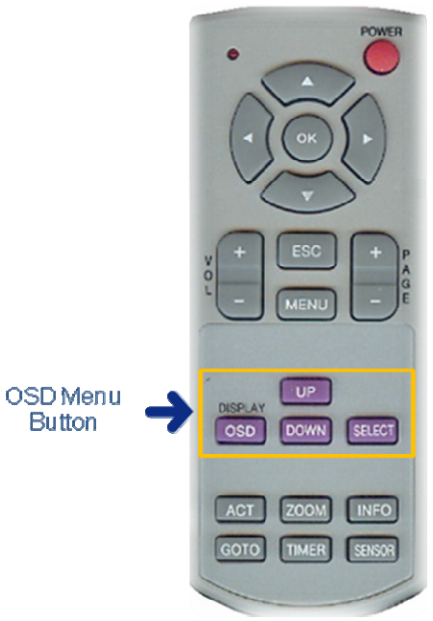
Connect the power cord to the power terminal of the power adaptor.

⑥ SD CARD SLOT : Allows you to insert an optional SD memory card.

⑦ USB port : Allows you to insert an optional USB memory.

⑧ CF CARD SLOT : Allows you to insert an optional CF memory card.

■ Remote Control



OSD Menu	
OSD	OSD Menu on / off
SELECT	OSD menu Select
UP	OSD menu Up
DOWN	OSD menu Down

Player Menu	
MENU	MENU ON / OFF
ACT	Co-Play
△	Up Key
◁	Left Key
OK	Play / Pause Key
▷	Right Key
▽	Down Key
ESC	Return Key
VOLUME	+ Up / - Down
PAGE	+ Up / - Down
Go To	Move to Main Menu
INFO	Subtitle On/Off

2. Connecting

■ Power

- Connect the adapter cable to the power terminal on the back (or side) of the product.
- Connect the power cord to the power adapter.
- Plug the power cord for the product into a nearby outlet.

■ USB

- Slide the card in the direction marked on the top of the card.

■ CF or SD memory card

- Slide the card in the direction marked on the top of the card.

3. Using

■ Main Menu Window

As you insert Memory card or External USB device,
You can find out 3kind of select mode as below picture.
You can select Icon you want by pushing OK button.
And then OSD Icon move to Multi Media Select Window.

* NO DEVICE :
as a comment you can see as You do not insert any storage Device.

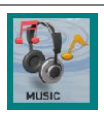
CF Card Select

Multi Memory card(SD/MMC) Select

USB Device Select

■ Multi Media Select Window

After select storage Device you want, you can move to PHOTO, MUSIC, MOVIE, E-BOOK, SETUP Mode.
After choice Mode you want Push OK button.
And then You can move to Mode you want.

				
Photo List	Music List	Movie List	E-book List	SETUP List

You can find out every files in each list after moving to List you want.

■ SETUP Function

You can change Language, Photo, Music, Movie, E-Book, Autoplay and Slide Show SET-UP In SETUP Mode.

SETUP Menu Viewing

Language	☐ English ☐ Korean	
Slideshow Option	Slideshow Speed	☐ Fast ☐ Normal ☐ Slow
	Slideshow Effect	☐ Normal ☐ Random ☐ Bottom_Top ☐ Top_Bottom ☐ Left_Right ☐ Right_Left
	Background Music	☐ Off ☐ On
	Slideshow	☐ Off ☐ On
Music Repeat	☐ File Repeat ☐ Folder Repeat ☐ Standard Play	
Movie Repeat	☐ File Repeat ☐ Folder Repeat ☐ Standard Play	
Ebook Setup	Auto Scroll	☐ Off ☐ On
	Auto Scroll Unit	☐ Line ☐ Paper
	Auto Scroll Time	☐ 1 ☐ 3 ☐ 5 ☐ 10 ☐ 15 ☐ 30 ☐ 60 120Seconds
	Background Music	☐ Off ☐ On
Autoplay	☐ **Off** ☐ **Video** ☐ **Photo&Music** ☐ **Playlist** ☐ **Video&Photo**	
Version		

■ Menu Key Function

• PHOTO Help Menu Bar

(During Photo Playback or Photo Slide Show, Photo Help Menu Bar shows up on the Screen if Menu Button is pressed)

- OK button for switching between begin / pause Slide Show
- Stop Photo Playback and return to Photo Preview
- rotate the picture 90 ° clockwise
- display the picture with different scale (x2, x3, x4, x5, x1)
  - ∗ Zoomed picture can be moves up and down, left and right using arrow buttons on the Remote (not applicable some picture files)
- playback previous picture
- playback nest picture
- shows details of Photo

• Movie Help Menu Bar

(During Movie Playback Help Menu Bar shows up on the Screen if Menu Button is pressed)

- start / pause Playback
- Stop playback and go back to move file list
- go to previous track
- fast backward : (x1 → x2 → x3 → x4 → x5 → Play)
- fast forward: (x2 → x3 → x4 → x5 → Play)
- go to next track
- show details of Movie file
- Zoom (x2 → x3 → x4 → 1x)

Subtitle (▲▼) : On/ Off

Audio (◀▶) : 2ch MP3

Standard Play (Play Entire Folder)

Folder Repeat (Repeat Entire Folder)

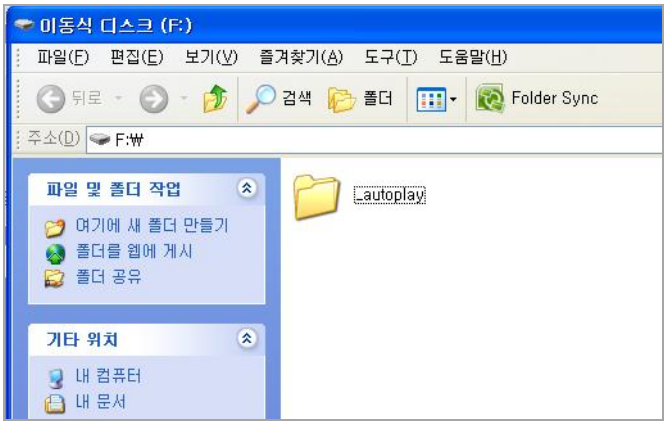
File Repeat (Repeat Designated File)

■ Autoplay Setting Method

- First of all, Every Memory card should be extracted and then Power on You can find out bellows "NO DEVICE".
- Select SETUP Mode and move down to Autoplay and then push OK Button.
- In Autoplay Mode, Push OK Button after choice Mode you want.
- About Autoplay Mode

OFF	Don't use Autoplay function
Video	Only Movie files are supported
Photo&Music	• Music files are supported • Photo files are supported • Music and Photo files are supported at the same time As Music and Picture files are exist.
Playlist	All files are played in order by Playlist.txt (JPEG, Movie, Music)
Video&Photo	Photo and Movie files are played in order.

※ When you use Autoplay mode, all files including Playlist.txt file should be in _autoplay folder in storage Device. (Refer to below picture)

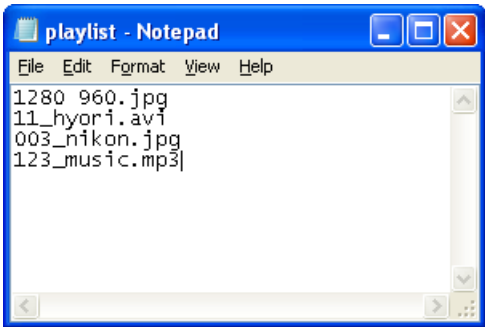


- Playlist using Method

  Using Notepad, Wordpad, you should make a Text file as below.

  By Playlist Mode You can play files especially you want over an over.

  (In this Playlist Mode, Only Picture files are played not played Music)



File names should be written "playlist.txt" ,
And saved in "_autoplay" folder under root directory of storage Device.

■ USB AutoSync function

- All files in External USB Memory Device are copied in Memory cards directly.
- Insert External USB Memory Device into Player On playing Mode or not,
  Player copy all of files in External USB Memory Device to Memory Cards after removing all of files in Memory cards. After finishing turn off and on the Player
- When you use Direct Copy function, Make sure External USB memory Device and Memory card s have same folder name "_autoplay".

■ Display OSD (On Screen Display)

The OSD provides certain functions to have clear image and others. The control functions are defined on OSD operation as follows.

• OSD Hot Key Function

OSD Key	Key Function
MENU	Open OSD menu window.
VOL+	Volume is up.
VOL-	Volume is down.
SELECT	"Auto Adjust" in RGB input only.
POWER	Power on/off.

• OSD Menu

① RGB, DVI Input

OSD Menu	Sub Menu
PC	Contrast, Brightness, Color Mode, Scale, Auto Adjust, Auto Dimming
Geometry	H-Position, V-Position, Clock, Phase, Screen Reverse
System	OSD Language, OSD H-Position, OSD V-Position, OSD Duration, OSD Halftone, Information, Memory Recall

OSD Menu		Sub Menu & Function
PC	Contrast	Contrast
	Brightness	Backlight Brightness
	Color Mode	User, 6500K, 9300K
	Scale	Normal(16:9), Center(4:3)
	Auto Adjust	Adjust H/V Position, Clock and Phase
	Auto Dimming	Use a light sensor to change backlight brightness
Geometry	H-Position	Horizontal Position
	V-Position	Vertical Position
	Clock	Clock
	Phase	Phase
	Screen Reverse	Rotate screen in 180°
System	OSD Language	English, Korean
	OSD H-Position	OSD menu horizontal position
	OSD V-Position	OSD menu vertical position
	OSD Duration	OSD menu duration (second)
	OSD Halftone	OSD menu halftone
	Information	Display input information and version
	Memory Recall	Initialize

② Component Input

OSD Menu	Sub Menu
Picture	Contrast, Brightness, Hue, Saturation, Sharpness, Color Tone, Scale, Picture Mode, Auto Dimming
Sound	Volume, Mute
System	OSD Language, OSD H-Position, OSD V-Position, OSD Duration, OSD Halftone, Information, Memory Recall, Screen Reverse
Temperature	Temp. Control, Heater Control, Fan Control, Current Temp.

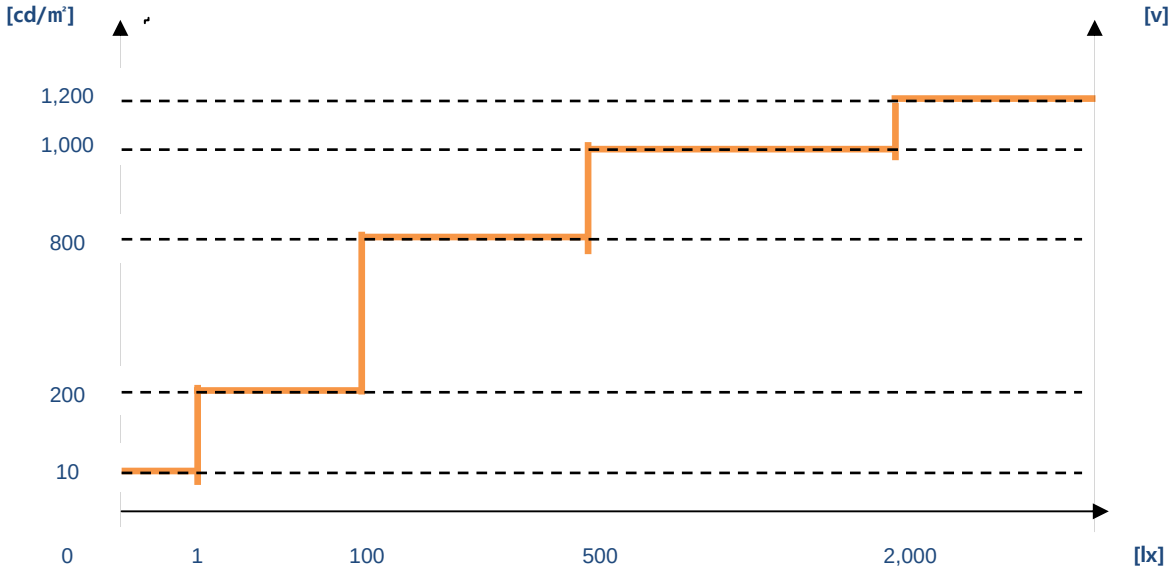
OSD Menu		Sub Menu & Function
Picture	Contrast	Contrast
	Brightness	Backlight Brightness
	Hue	Hue
	Saturation	Saturation
	Sharpness	Sharpness
	Color Tone	Normal, 6500K, 9300K
	Scale	Full(16:9), Normal(4:3)
	Picture Mode	User, Standard, Movie, Vivid
	Auto Dimming	Use a light sensor to change backlight brightness
Sound	Volume	Audio volume
	Mute	Audio mute
System	OSD Language	English, Korean
	OSD H-Position	OSD menu horizontal position
	OSD V-Position	OSD menu vertical position
	OSD Duration	OSD menu duration (second)
	OSD Halftone	OSD menu halftone
	Information	Display input information and version
	Memory Recall	Initialize
	Screen Reverse	Rotate screen in 180°
Temperature	Temp. Control	Use a temperature sensor to control Heater or Fan
	Heater Control	Heater On/Off according to temperature
	Fan Control	Fan On/Off according to temperature

• Sensor Function

① Light sensor (TSL2560)

When Auto Dimming is 'ON',
- Do not adjust brightness.
- Brightness of monitor is changed according to brightness of its environmental brightness.

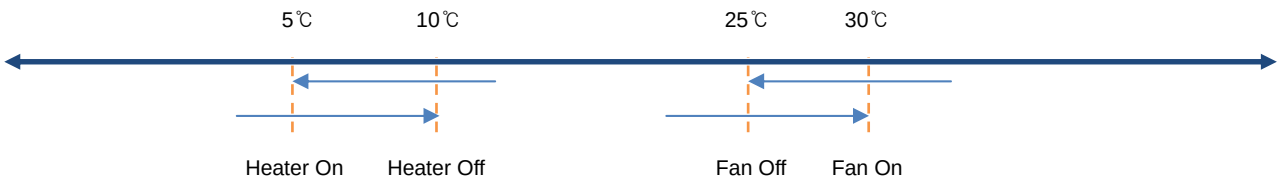
Light Sensor Operation Range



② Temperature sensor (TMP75)

When Heater/Fan Control is 'ON',
Heater or fan operates according to On/Off Temperature.

Temperature Sensor Operation Range



4. Specifications

■ Specification

Items		Specifications
Model Name		SUN-216B
Display	Type	21.6" TFT LCD with White LED Backlight
	Luminance	1,200 cd/m^2 (typical)
	Resolution	WXGA (1366 x 768 pixels) Resolution
	Interface	LVDS
Supported Formats	Movie	Xvid, MPEG-1/2/4, DivX
	Photo	JPEG, BMP
	Audio	MP3, WMA
USB		Hi-Speed USB 2.0 (USB 2.0 compliant)
Memory Card		CF, SD
Power	Rating	12V DC, 3.8A (typical)
	Comsumption	46W
General	Dimensions	506.4 x 319 x50 mm
	Weight	5 Kg
Operating Temperature		0°C to 50°C
Storage Temperature		-20°C to 60°C

※ Specifications are subject to change without prior notice for product performance enhancement.

■ Supported File Format

- Photo

	Format	Support (Yes/NO)	Remarks (Maximum resolution Bit rate / etc)
1	JPEG	Yes	8000 x 6000
2	baseline JPEG	Yes	below 8000 x 6000
3	Progressive JPEG	Yes	Max file size : 40Mbytes
4	BMP	Yes	6016-4000

※ A license is required.

- Audio

	Format	Support (Yes/NO)	Remarks (Maximum resolution Bit rate / etc)
1	MP3, Layer1,2	Yes	Sampling Rate:8KHz~48KHz Bit Rate : 32Kbps~320Kbps
2	WMA	Yes	Sampling Rate:22KHz~48KHz Bit Rate : 32Kbps~192Kbps

※ A license is required.

- Subtitle

	Category	Format	Support (Yes/NO)	Remarks (Maximum resolution Bit rate / etc)
1	Subtitle	SMI	Yes	
2		SRT	Yes	

※ A license is required.

- Movie

	Category	Format		Support (Yes/NO)	Remarks (Maximum rasolution Bit rate / etc)
		Video	Audio		
1	MPGE1	MPEG1	MP3,layer1,2	Yes	1192 Kbps, 720x576
2	MPEG2	MPEG2	MPEG2	Yes	12 MBbps, 720x576
3	MPEG4	Divx 3.0	PCM	Yes	15055 Kbps, 800x450
4			AC3	Yes	15055 Kbps, 800x450
5			MP3	Yes	15055 Kbps, 800x450
6			OGG		without testing
7		Divx 4.0	PCM	Yes	15055 Kbps, 800x450
8			AC3	Yes	15055 Kbps, 800x450
9			MP3	Yes	15055 Kbps, 800x450
10			OGG		without testing
11		Divx 5.0	PCM	Yes	15055 Kbps, 800x450
12			AC3	Yes	15055 Kbps, 800x450
13			MP3	Yes	15055 Kbps, 800x450
14			OGG		without testing
15		Divx 6.0	PCM	NO	
16			AC3	NO	
17			MP3	NO	
18			OGG	NO	
19		XviD	PCM	Yes	15055 Kbps, 800x450
20			AC3	Yes	15055 Kbps, 800x450
21			MP3	Yes	15055 Kbps, 800x450
22			OGG		without testing
23		MS-MPEG4 V1	PCM	NO	
24			AC3	NO	
25			MP3	NO	
26			OGG	NO	
27		MS-MPEG4 V2	PCM	NO	
28			AC3	NO	
29			MP3	NO	
30			OGG	NO	
31		MS-MPEG4 V3	PCM	NO	
32			AC3	NO	
33			MP3	NO	
34			OGG	NO	
35		Standard MP4	Standard MP4	NO	

	Category	Format		Support (Yes/NO)	Remarks (Maximum rasolution Bit rate / etc)
		Video	Audio		
36	WMT7	WMV7	WMA7	NO	
37	WMT8	WMV8	WMA8	NO	
38	WMT9	WMV9	WMA9	NO	
39	MJPEG	MJPEG	PCM	Yes	15066 Kbps, 640x480(30fps)
40			AC3	Yes	15066 Kbps, 640x480(30fps)
41			MP3	Yes	15066 Kbps, 640x480(30fps)
42			OGG		without testing
43	H.264			NO	
44	.mpg	MPEG1	MP3,layer1,2	Yes	1192 Kbps
45	.3gp	H.263	AMR	NO	
46		MPEG4	AMR	NO	
47	.mp4	MPEG4	AAC	Yes	
48	.avi	MPEG4		Yes	15066 Kbps
49		DivX	MP3	Yes	15066 Kbps
50		Xvid	MP3	Yes	15066 Kbps
51	.asf			NO	

※ A license is required.

5. Troubleshooting

■ Troubleshooting

Symptoms	Causes and Actions
The power does not turn on.	• Check the connections for the adapter cable and the power terminal of the product.
I have connected an external storage device but it is not recognized.	• Please check the connection between product and external storage.
I inserted a memory card but it does not operate. I connected a USB memory but it does not operate.	• Check the files of your memory card. • Please try a different storage device.

■ Terminology

Terms	Description
JPEG (Joint Photographic Coding Expert Group)	• JPEG is an image compression technology. It provides the smallest loss of all image compression technologies. It is used widely to transmit multimedia files on the Internet and for other uses. An image file formatted in the JPEG format is called a JPEG or JPG file. Usually, a JPEG file is created by taking a picture with a digital camera, by drawing on a computer, or by a graphic package and then by compressing the graphics image into the JPGE format.
SD Card (Secure Digital Card)	• An SD card is a Flash memory card the size of a postage stamp. It provides high stability and high capacity. It is widely used in various digital products such as PDAs, digital cameras, MP3 players, cell phones, and notebook PCs. Its appearance is similar to that of MMC, but the number of pins and their thickness is different. It also has a password setting function for data security.

6. Precautions

■ On Safety

- Insert the power plug correctly until it is firmly in place. – Failing to do so, may cause fire.
- Do not use a damaged power plug, cord or outlet, as this may cause electric shock or fire.
- Do not touch the power plug with wet hands, as this may cause electric shock.
- Make sure to turn the power off and disconnect the power plug from the outlet before moving the product.
- Ensure that the power plug is disconnected before cleaning the product.
- Keep the product away from places exposed to oil, smoke or moisture.

■ On Installation

- Do not put any heavy object on top of the product or apply a strong shock to the product. It may cause a malfunction or damage.
- Do not leave the product in a place subject to excessive dust.
- Do not expose the player to water. The player is not waterproof.
- Do not place the power cord near a heater, as the power cord may melt, causing electric shock or fire.

■ On the Use

- Do not insert any metal objects such as forks, wire, or gimlets, or flammable items such as paper or matches into the ports at the back of the product, as this may cause electric shock or fire.
- Never disassemble, repair, or modify the product yourself.

■ On the LCD

- Do not apply strong force to the surface of the LCD. This may cause a distortion in colors or brightness, or cause a malfunction of the LCD.

■ On Cleaning

- When cleaning the product, first disconnect the power plug and clean it with a soft, dry cloth.